3:Watson E-4,5 (1943) 1952 SM4 Guarani SM4

indication, quite important to the southern groups and to the Cayuá.[49] Sweet potatoes may have been more important in the south than in the equatorial north, if we consider only the Tupi-Guarani.

Far more impressive than the differences of degree of use of various plants, both wild and cultivated, are the similarities of kind. The list of plants for the north is surprisingly close to that for the south, and it would be interesting to know to what extent the similarity may be explained on the grounds of cultural diffusion and to what extent on grounds of climatic and phytogeographic similarities. The use of wild plants for food is also parallel with the north although plant geography is obviously more directly influential here.

Manioc, corn, sweet potatoes, beans, squashes, peanuts, *cará* (*Dioscorea sp.*), *mangára* (*Aroidea sp.*), *mbakuká* (a *leguminosa*), watermelons, bananas (?) pineapples, and papaya were among the most important crops. Manioc, corn, and sweet potatoes were the primary crops, to judge somewhat but not solely by the present. Several varieties of manioc were recognised, and probably both the bitter and the sweet were known, although it does not appear that bitter manioc was used to the same extent in the south that it was in the north. A number of varieties of both corn and potatoes were recognized. Corn was distinguished by whether it was the flinty type or the soft, starchy kind and, within the latter class, also by color. The Cayuá, presumably in the past as at present, attempted to keep separate their plantations of different kinds of corn within the limits of their crude appreciation of the manner of intermixture. Sweet potatoes, like corn, were distinguished by color (of the pulp), and about seven kinds were thus named. They range from the whitish, through the purple and reddish kinds, to the light yellow and the bright orange-yellow. The latter are similar to what are sometimes called "yams" in this country. Judging only from the present, little attempt was made to plant and harvest sweet potatoes according to color.

Technologically, the agriculture of the Cayuá was of the familiar tropical slash-and-burn type, with definitely recognized stages in the process. First the small brush and trees were cut, and then the larger trees, though only as many of them as seemed absolutely necessary or possible within the limits of available equipment. (The large trees were not so readily felled, of course, as they are at present by the use of steel axes.) The fallen vegetation was allowed to lie for a while to dry in the sun, the dry winter season of the year usually therefore being chosen for the cutting. When sufficiently dry, or if wet weather impended, the slash was fired. Sometimes slash was piled about the trunks of standing trees or unburned fallen logs by way of gradually

[49] If Neo-Brazilian acculturation today is any indication, it does seem as if the indigenous North developed the use of manioc to a higher degree than the South (and probably developed the use of corn somewhat less than the South). That is, the present-day use of manioc by whites is more developed in the North than the South.

3:Watson E-4,5 (1943) 1952 SM4 Guarani SM4

'Slashing activity preparatory to burning should be completed somewhat in advance of the end of the dry season, preferably by August. The trunks, limbs, and foliage of the cut vegetation will then be partly dried out in order to burn well. Sometimes the cutting for the coming season may start as early as April. But a surprising number of Cayuá are remiss in attending to their clearing activities in sufficient time to get a good burning. Thus there are complaints of rains which came before they should have and impeded the burning, and other similar difficulties. In 1943, some *kokwé* were still being burned by October 19 while others already had beans and corn, and other plants, well above the ground.

During the agricultural months, which are, of course, the summer months, hunting is relegated by most Cayuá to occasional week-end trips. On these occasions the man may be absent for a day, or even only a half-day, roaming the woods and fields in search of game. At other times, except for an occasional morning or afternoon excursion, made perhaps when the weather is not right for work in the *kokwé*, he will not be able to find sufficient time for hunting. Moreover, a man will use some of the time not needed in agriculture in some other way, such as craft work, repairs about the house, and the like. During the winter, there is more time for hunting, but then it is often bitterly cold for the light clothing the Cayuá wear.

The first fruits ceremony, marked by the "baptism" of new corn, usually comes in late January or February, but the entire harvest, including other crops, may well run from sometime before until sometime after the baptism. This community-sanctioned harvest, however, cannot be considered the termination of all agricultural activity for the year. The plants which the Cayuá say "have no season," notably manioc and sweet potatoes, are not necessarily harvested in the usual sense. They may be left in the ground and merely dug up and used as needed. This activity in some cases continues practically throughout the year, depending only on when the crops were sown.

The Relative Importance of Agriculture, Fishing, and Hunting

While agriculture has benefited by acculturation in other ways, no large number of important new plants has been taken over. The crops aboriginally most important remain so still, but a few new plants have been adopted which are of some significance to the Cayuá. Among them are two types of sugar cane, widely grown as a delicacy and for addition (the juice) to *cauí*. Certain kinds of beans, rice—which is so far grown by only a few—and several garden crops have also been adopted, such as onions and garlic.

The present Cayuá allege that one of their two main varieties of corn comes from the whites (that called *aBatí tupí*, the hard or flint type), although this is not borne out by the botanical evidence.[130] Nevertheless, Cayuá usages

[130] Cutler, 1946, p. 280.

3: Watson E-4,5 (1943) 1952 SM4 Guarani SM4

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FIG. 6. Recently fired *kokwé* with beans coming up amongst the fallen and charred trunks.

FIG. 7. In a *kokwé*, making holes for planting cuttings of manioc. Hoe is the heavy type universally used.

FIG. 8. Woman planting corn with digging stick (*sarakwá*). Hole just made is at her feet. Four or five (but always the same number) grains are dropped in, taken daily from middle of the ear. In the background, a bamboo grove.

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FIG. 9. Woman returning from clearing in forest (*kokwé*) with back basket (*adjaké*) loaded with produce. In her right hand she brings firewood, in her left is the worn-out machete she uses to harvest with. Note tumpline on basket.

FIG. 10. Four women pounding corn in coordination. As many as five sometimes do this. The occasion is the preparation of *cauí* for a village-wide drinking fest to be held in about three days.

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